

CLAIMS

What is claimed is:

- 1 1. A cellular telephone comprising:
 - 2 a paper substrate;
 - 3 a printed circuit patterned on the paper substrate;
 - 4 a switch electrically coupled to the circuit;
 - 5 an input diaphragm electrically coupled to the circuit, said input
 - 6 diaphragm being attached to the paper substrate in such a
 - 7 manner that allows the input diaphragm to vibrate relative thereto;
 - 8 an output diaphragm electrically coupled to the circuit, said output
 - 9 diaphragm being attached to the paper substrate in such a
 - 10 manner that allows the output diaphragm to vibrate relative
 - 11 thereto; and
 - 12 a battery electrically coupled to the circuit and formed in the paper
 - 13 substrate, said switch being activated to cause the cellular
 - 14 telephone to call a predetermined number.
- 1 2. The cellular telephone according to claim 1 wherein the paper substrate
- 2 has a length of about 3.5 inches and a width of about 2 inches.
- 1 3. The cellular telephone according to claim 1 wherein the paper substrate
- 2 is a business card including writing thereon.
- 1 4. The cellular telephone according to claim 1 further comprising a filament
- 2 antenna, said filament antenna being formed in an edge of the paper substrate.
- 1 5. The cellular telephone according to claim 4 wherein the antenna includes
- 2 a nub at one end, said nub being operable to extract the antenna from the
- 3 substrate.
- 1 6. The cellular telephone according to claim 1 wherein the switch is a
- 2 slideable switch.

1 7. The cellular telephone according to claim 1 wherein the input diaphragm
2 and the output diaphragm are both paper diaphragms.

1 8. The cellular telephone according to claim 1 wherein the battery is made
2 from paper technologies.

1 9. The cellular telephone according to claim 1 wherein the circuit is
2 patterned on the substrate with a conductive ink.

1 10. A paper business card comprising:
2 a paper substrate having a front surface layer and a back surface layer,
3 said paper substrate including writing on the front layer;
4 a printed circuit patterned on the paper substrate;
5 a switch electrically coupled to the circuit;
6 a paper microphone diaphragm electrically coupled to the circuit, said
7 microphone diaphragm being attached to the paper substrate in
8 such a manner that allows the microphone diaphragm to vibrate
9 relative thereto;
10 a paper speaker diaphragm electrically coupled to the circuit, said
11 speaker diaphragm being attached to the paper substrate in such
12 a manner that allows the speaker diaphragm to vibrate relative
13 thereto; and
14 a battery electrically coupled to the circuit and formed in the paper
15 substrate, said battery being made from paper technologies, said
16 switch being activated to cause the cellular telephone to call a
17 predetermined number.

1 11. The card according to claim 10 further comprising a filament antenna,
2 said filament antenna being formed in an edge of the paper substrate.

1 12. The card according to claim 11 wherein the antenna includes a nub at
2 one end, said nub being operable to extract the antenna from the substrate.

1 13. The card according to claim 10 wherein the switch is a slidable switch.

1 14. The card according to claim 10 wherein the circuit is patterned on the
2 substrate with a conductive ink.

1 15. The card according to claim 10 wherein the paper substrate has a length
2 of about 3.5 inches and a width of about 2 inches.

1 16. The card according to claim 10 wherein the switch is formed on the front
2 layer and the microphone and speaker diaphragms are formed on the back
3 layer.

1 17. A method of making a disposable cellular telephone, comprising:
2 providing a paper substrate;
3 patterning a circuit on the substrate;
4 attaching a paper input diaphragm to the substrate in a manner that
5 allows the input diaphragm to vibrate relative thereto;
6 attaching a paper output diaphragm to the substrate in a manner that
7 allows the output diaphragm to vibrate relative thereto; and
8 forming a battery within the substrate.

1 18. The method according to claim 17 wherein the circuit is patterned on the
2 substrate with a conductive ink.

1 19. The method according to claim 17 wherein the paper substrate is a
2 business card having writing thereon.

1 20. The method according to claim 17 further comprising attaching a filament
2 antenna to the substrate.